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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,263	08/21/2001	Charles Beck	2539/102	6454

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EXAMINER

RIBAR, TRAVIS B

ART UNIT	PAPER NUMBER
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1711

10

DATE MAILED: 04/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,263

Applicant(s)

BECK ET AL.

Examiner

Travis B Ribar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-14, 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-24 and 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☐ Interview Summary (PTO-413) Paper No(s). _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The applicant's amendment filed January 21, 2003 overcomes the rejections under this heading in paragraphs 9 and 10 of the office action dated August 11, 2002.
2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 20, 24, and 27-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. The term "...is reduced relative to the amount..." in claims 27 and 29 is a relative term which renders the claim indefinite. The term "...is reduced relative to the amount..." is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claims 28 and 30 are rejected due to their dependence from claims 27 and 29.
5. Claim 20 recites the limitation "pigmented fourth-reactant solvent mixture" in lines 1-2 and 4 of part 'b'. There is insufficient antecedent basis for this limitation in the claim.

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6. Regarding claims 20 and 24, it is unclear from the language of the claim what the composition of the resulting mixture will be, since the compositions of the two solutions that are combined to make each mixture are not disclosed. Hence, the claimed ratios do not describe any particular range of chemical compositions. The examiner will therefore rely on the percent solids of each mixture to determine patentability.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. The examiner maintains the rejection made under this heading in paragraph 12 of the office action dated August 11, 2002 (see paragraph 9 below).

9. Claims 15-16, 19, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Aizawa et al., as evidenced by Crast et al.

The office action dated August 11, 2002 contains the text of this rejection, which is included below and expanded upon for the applicant's benefit and to respond to some of the applicant's arguments put forth in the amendment filed January 21, 2003.

Aizawa et al. discloses an in-mold coating process (column 8, lines 31-61) that comprises all of the steps the applicant claims in claims 15-16, 19, and 21-23. Tables 3 and 4 show the temperature of the mold during the curing process. The method meets claim 22 because the primer coating film in Aizawa et al. inherently acts as a barrier

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layer and the substrate is reinforced with glass or mineral fibers (column 7, lines 41-43).

The examiner notes that even though Aizawa et al. does not explicitly disclose that the polyurethane coating compositions are made by mixing a polyol/solvent mixture with a polyisocyanate/solvent mixture before spraying, such a method is well known in the art to prepare a sprayable polyurethane-precursor coating (see Crast et al. column 2, lines 23-33).

In the above embodiment, the sealer coating film in the reference is the same as the applicant's clear-coat mixture and the primer coat is the same as the applicant's pigmented layer. Though the examiner notes that the sealer coating film in the example shown in the reference contains pigments, the reference makes special note of the color of the film (see Tables 3 and 4), indicating that changing the color of the film in any common manner, including making it clear by removing pigments, is immediately envisioned within the reference.

Another manner in which Aizawa et al. meets the compositional requirements of the present application is one in which the applicant's clear-coat layer is the top coat layer in Aizawa et al. The top coat layer in Aizawa et al. may be clear (Table 7), making it a clear-coat layer according to the applicant's invention. In this embodiment, the sealer coating film would act as the applicant's pigmented mixture and the primer coating film would be the applicant's substrate-forming material.

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al. in view of Crast et al.

The combination of Aizawa et al. and Crast et al. is discussed above. However, neither reference discloses the volume ratio of the components, relying instead on the weight ratio of the reactants.

The applicant has not claimed specific reactant/solvent ratios for the first, second, third, or fourth reactant/solvent mixtures. Therefore it is not possible to know the exact chemical identity of the combined mixtures (made from the first/second and third/fourth reactants, respectively), namely how much reactant is present in each mixture. Therefore the examiner is mainly relying on the percent solids the applicant claims in each of the combined mixtures in claims 20 and 24—the range of 0.3 to 0.6 – to determine the patentability of this claim. The examiner supports this position using the fact that both the reference and the present application are concerned with curing the compositions in the claimed mixture, meaning that the range of stoichiometric ratios envisioned by Aizawa et al. and the range of stoichiometric ratios the applicant envisions would appear to overlap, causing the percent solids the applicant claims to be the potentially patentable subject matter.

Aizawa et al. discloses polymer mixtures that contain slightly less than 60% solids if pigment is present and 60% solids if no pigment is present (see Tables 3 and

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4). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add more solvent to the composition in Aizawa et al. The motivation for doing so would be to make the composition easier to spray. Therefore it would have been obvious to combine Aizawa et al. with Crast et al. to obtain the invention as specified in claims 20 and 24.

12. The examiner maintains the rejection made under this heading in paragraph 14 of the office action dated August 11, 2002 (see paragraph 13 below).

13. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al. as evidenced by Crast et al. as applied to claim 15 above, and further in view of Matzinger et al.

The office action dated August 11, 2002 contains the text of this rejection, which is included below.

Aizawa et al. discloses all of the aspects of claims 17 and 18 except the presence of the barrier layer. Matzinger et al. discloses a barrier web layer (column 4, lines 19-25) that acts as a protective coating for a substrate. Matzinger et al. also discloses that the materials that its invention includes are compatible with the invention in Aizawa et al. (column 5, line 33 to column 6, line 18).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the barrier layer in Matzinger et al. to the multilayer laminate structure in Aizawa et al. The motivation for doing so would be to provide additional

protection for the substrate. Therefore it would have been obvious to combine Matzinger et al. with Aizawa et al. to obtain the invention as specified in claims 17 and 18.

Response to Arguments

14. The applicant argues that the volume ratio claimed in the amended claims is novel. This is not persuasive because there is no argument or showing by the applicant on the record stating that the prior art applied to the present claims does not include or envision the volume ratio the applicants claim.

15. The applicants also argue that no clear coat layer is formed in the mold in Aizawa et al. This is not persuasive for the reasons given in paragraph 9 of this office action.

16. Finally, the applicant argues that Matzinger et al. is not applicable to the present application because the material in Matzinger et al. placed into a mold that contains layers that are sprayed on and that such structures have properties that are patentably distinct or unexpected when placed over layers that are sprayed on versus layers that are not sprayed on. This is not persuasive because there is no evidence in the record to support such a claim commensurate in scope with the reference applied.

Conclusion

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17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis B Ribar whose telephone number is (703) 305-3140. The examiner can normally be reached on 8:30-5:00 Monday through Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Travis B Ribar
Examiner
Art Unit 1711

TBR
March 27, 2003



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700